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[Continued on next page]

(54) Title: IMMUNOGENIC AND THERAPEUTIC COMPOSITIONS FOR *STREPTOCOCCUS PYOGENES*

FIG. 3

Signal sequence   ■ Domain 1   □ Domain 2   ■ Domain 3   ■ Domain 4

- aa 1-31 (blue line) correspond to the predicted signal sequence
- aa 1-99 are not present in the Perfringolysin O sequence (see homology above)
- Peptides underlined in black were identified by surfome analysis in SF370-M1 (pep1 and pep2) and in 3650-M6 (pep3) strains

> pep1: 36-QNTASTETTTNEQPKPESSELTTEK-61  
> pep2: 155-NINTTPVDISIIDSVTDR-172  
> pep3: 450-TEYVETTSTHEY-460

(57) **Abstract:** Compositions for preventing and/or treating *S. pyogenes* infection which comprise one or more active agents. The active agents are SLO antigens, nucleic acid molecules encoding the SLO antigens, and/or antibodies which selectively bind to the SLO antigens.

1	<b>MSNKKTPKKY SRVAGLLTAA LITGNLVTAN AESNKQNTAS TETTTTNEQP</b>	pep1
51	<b>KPESSELTTE KAGQKTDDML NSNDMIKLAP KEMPLESAEK EEEKSSEDKKK</b>	
101	<b>SEEDHTEEIN DKIYSLNYNE LEVLIAANGKQI LENFVPAEGV KRADRFLIVTE</b>	
151	<b>REKKKNIMTPP WDTSIEDEVT DRTYPAAQL ANKGFTENKP DAVVTKRNPQ</b>	pep2
201	<b>KIHIDLPGMG DKATVEVNDP TYANVSTAID NLVNQWHHDNY SGGNTLP</b>	
251	<b>EKTRKSYMKR SQCEPANUN GKEPQDQED PTKRQKQK INWILMVKOI</b>	
301	<b>FYTWSANLPN NPADVFDKSV TFKELQRKGV SNEAPPLFVS NVAYGRA</b>	
351	<b>KEETSSKSND VEAJFSANIK GDDVTRNQKQI SDELMENSSET AVWIGGDNV</b>	
401	<b>HNVVVAEED VERNMVKDT TFSRKNPAYE ISYTSVELKN NKGAGV</b>	pep3
451	<b>EYVETTSTHEY NSCKQNLSHQ CAVVAGQEDW DDEINYDDKG KEVLUUGRRWD</b>	
501	<b>NNWASKTSPP STWAPLGANS RMTTMRREG TGLAWEWWRK VDTERDVNGS</b>	
551	<b>KEINVNRSGS QI SEYGCSTYAS</b>	



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**A. CLASSIFICATION OF SUBJECT MATTER**  
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According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, EMBASE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Further documents are listed in the continuation of Box C.

See patent family annex.

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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